পঞ্জীভুক্ত নম্বৰ - ৭৬৮ /৯৭ Registered No.-768/97

অসম ৰাজপত্ৰ

সত্যমেব জয়তে

THE ASSAM GAZETTE

অসাধাৰণ

EXTRAORDINARY

প্ৰাপ্ত কৰ্ত্তৃত্বৰ দ্বাৰা প্ৰকাশিত

PUBLISHED BY THE AUTHORITY

নং 129 দিশপুৰ, সোমবাৰ, 24 মার্চ, 2025, 3 চ'ত, 1947 (শক)

No. 129 Dispur, Monday, 24th March, 2025, 3rd Chaitra, 1947 (S. E.)

GOVERNMENT OF ASSAM

ORDERS BY THE GOVERNOR

ASSAM ELECTRICITY REGULATORY COMMISSION

NOTIFICATION

The 18th December, 2025

AERC (ANCILLARY SERVICES) REGULATIONS, 2024

AERC No. 964/2024/7.- In exercise of the powers conferred under Section 181 read with clauses (h) and (i) of sub-section (1) of Section 86 of the Electricity Act, 2003 (Act 36 of 2003) and all other powers enabling it on this behalf, the Assam Electricity Regulatory Commission hereby makes the following Regulations, namely: -

1. Short title and commencement

(1) These regulations may be called the Assam Electricity Regulatory Commission (Ancillary Services) Regulations, 2024.

(2) These Regulations shall come into force from April 1st, 2025.

2. Objective

While it is desirable in the interest of grid security that adequate reserves are maintained locally at the State level for each state control area as per the State Grid Code or IEGC as the case may be, these regulations aim to provide mechanisms for procurement, through administered as well as market-based mechanisms, deployment and payment of Ancillary Services at the State level for maintaining the grid frequency close to 50 Hz, and restoring the grid frequency within the allowable band as specified in the Grid Code and for relieving congestion in the transmission network, to ensure smooth operation of the power system, and safety and security of the grid.

3. Definitions and Interpretation

(1) In these regulations, unless the context otherwise requires,

a. "Act" means the Electricity Act, 2003 (36 of2003);

b. "AERC" means the Assam Electricity Regulatory Commission also referred as the Commission

c. "AGC signal" means automated signal from NLDC/RLDC/SLDC as the case may be, through which the generation of a SRAS Provider is adjusted;

d. "Ancillary Service" or "AS" in relation to power system operation, means the service necessary to support the grid operation in maintaining power quality, reliability and security of the grid and includes Primary Reserve Ancillary Service, Secondary Reserve Ancillary Service, Tertiary Reserve Ancillary Service, active power support for load following, reactive power support, black start and such other services as defined in the Grid Code;

e. "Area Control Error" or "ACE" means the instantaneous difference between a control area's net actual interchange and net scheduled interchange, taking into account the effects of frequency bias and correction of measurement errors;

f. "AS capacity obligation" is the capacity signalled for despatch by the NLDC/RLDC/SLDC as the case may be,under SRAS or the capacity procured under TRAS;

g. "Automatic Generation Control" or "AGC" means a mechanism through which the generation of the SRAS Provider in a control area is automatically adjusted in response to the Secondary Control Signal;

h. "CERC" means the Central Electricity Regulatory Commission referred to in sub-section (1) of Section 76 of the Act;

i. "Commitment charge" means the amount payable to the TRAS Provider for the quantum of TRAS-Up cleared in the Day Ahead AS Market or the Real Time AS Market, as the case may be, but not instructed for despatch.

j. "Compensation charge" means the price declared by an SRAS Provider other than a generating station whose tariff is determined under Section 62 of the Act for participation in SRAS;

k. "Demand Response" means variation in electricity consumption by end consumers or drawal by a control area, on standalone or aggregated basis, as per the system requirement;

l. "Deviation and Ancillary Service Pool Account" means the State Deviation Pool Account Fund referred to in the DSM Regulations:

m. 'Detailed Procedure' means the detailed procedure issued by SLDC to that effect;

n. "DSM Regulations" means the Assam Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2024;

o. "Energy-Down bid" means the bid in Rs./MWh for the offered quantum submitted by the TRAS-Down Provider to pay to the concerned Deviation and Ancillary Service Pool Account;

p. "Energy Storage" in relation to the electricity system, means a facility where electrical energy is converted into any form of energy which can be stored, and subsequently reconverted into electrical energy;

q. "Energy-Up bid" means the bid in Rs./MWh for the offered quantum submitted by the TRAS-Up Provider;

r. "Flat frequency control" means a mechanism of correcting ACE by factoring in only the frequency deviation, and ignoring the deviation of net actual interchange from net scheduled interchange at State level;

s. "Flat tie-line control" means a mechanism of correcting ACE by factoring in only the deviation of net actual interchange from net scheduled interchange at State level, and ignoring frequency deviation;

t. "Frequency Response Characteristics" means automatic, sustained change in the power consumption by load or output of the generators that occurs immediately after a change in the load-generation balance of a control area and which is in a direction to oppose a change in frequency;

u. "Grid Code" means the Assam Electricity Regulatory Commission (Electricity Grid Code) Regulations, 2024 and its amendments thereof ;

v. "IEGC" means the Indian Electricity Grid Code, 2023 and its amendments thereof, as notified by the CERC.

w. "Nodal Agency" means the State Load Despatch Centre which shall be responsible for monitoring implementation of the Ancillary Services at the intra-State level and coordination with RLDC/ NLDC from time to time;

x. "Primary Reserve Ancillary Service" or "PRAS" means the Ancillary Service which immediately comes into service through governor action of the generator or through any other resource in the event of sudden change in frequency;

y. "Secondary Control Signal" means automated signal generated from the NLDC/RLDC/SLDC through which injection or drawal or consumption of an SRAS provider is adjusted, and includes AGC signal;

z. "Secondary Reserve Ancillary Service" or "SRAS" means the Ancillary Service comprising SRAS-Up and SRAS-Down, which is activated and deployed through secondary control signal;

x. "Secondary Reserve Ancillary Service Provider" or "SRAS Provider" means an entity which provides SRAS-Up or SRAS-Down in accordance with these regulations;

y. "SRAS-Down" means an SRAS that reduces active power injection or increases drawal or consumption, as the case may be, in response to secondary control signal;

z. "SRAS-Up" means an SRAS that increases active power injection or decreases drawal or consumption, as the case may be, in response to secondary control signal ;

aa. "Tariff Regulations" mean the AERC MYT Regulations 2024 and amendments thereof;

ab. "Tertiary Reserve Ancillary Service" or "TRAS" means the Ancillary Service comprising TRAS-Up and TRAS-Down and consists of spinning reserve or non-spinning reserve, which responds to despatch instructions from the NLDC/RLDC/SLDC as applicable;

ac. "Tie-line bias control" means a mechanism of correcting ACE by factoring in deviation of net actual interchange from net scheduled interchange at State level as well as frequency deviation;

ad. "TRAS-Down" means a TRAS that reduces active power injection or increases drawal or consumption, as the case may be, in response to despatch instructions of the NLDC/RLDC/SLDC as applicable;

ae. "TRAS-Down Provider" means an entity which provides TRAS-Down in accordance with these regulations;

af. "TRAS-Up" means a TRAS that increases active power injection or decreases drawal or consumption, as the case may be, in response to despatch instructions of the NLDC/RLDC/SLDC as applicable;

ag. "TRAS-Up Provider" means an entity which provides TRAS-Up in accordance with these regulations;

ah. "Un-Requisitioned Surplus" or "URS" means the capacity in a generating station that has not been requisitioned and is available for despatch, and is computed as the difference between the declared capacity or maximum possible generation (Pmax), as the case may be, of the generating station and its total schedule.

(2) Save as aforesaid and unless repugnant to the context or the subject-matter otherwise requires, words and expressions used in these regulations and not defined, but defined in the Act, or the Grid Code or any other regulation of the Commission shall have the meaning assigned to them respectively in the Act or the Grid Code or such other regulation.

(3) Reference to any Act, Rules and Regulations shall include amendments or consolidation or re-enactment thereof.

4. Scope

These regulations shall be applicable to intra-state entities , including entities having energy storage resources and entities capable of providing demand response qualified to provide Ancillary Services and other entities as provided in these regulations.

5. Types of Ancillary Services

(1) There shall be the following types of Ancillary Services, namely:

(a) Primary Reserve Ancillary Service (PRAS);

(b) Secondary Reserve Ancillary Service (SRAS);

(c) Tertiary Reserve Ancillary Service (TRAS); and

(d) In relation to power system operation, means the service necessary to support the grid operation in maintaining power quality, reliability and security of the grid and includes Primary Reserve Ancillary Service, Secondary Reserve Ancillary Service, Tertiary Reserve Ancillary Service, active power support for load following, reactive power support, black start and such other services as defined in the Grid Code;

(2) The mechanism of procurement, deployment and payment of SRAS and TRAS as referred to in sub-clauses (b) and (c) of clause (1) of this Regulation shall be as specified in these regulations.

(3) The mechanism of procurement, deployment and payment of Ancillary Services, referred to in sub-clause (a) of clause (1) of this Regulation, including for resources such as energy storage and demand response, and in sub-clause (d) of clause (1) of this Regulation, shall be as specified in the Grid Code or under these regulations to be notified separately, as the case may be.

6. Estimation of Reserves by the Nodal Agency

(1) The Nodal Agency shall, in coordination with Discom and state entity Generating Stations, submit requisite information to SLDC for estimating the quantum of requirement of SRAS and TRAS at the state level after factoring in the reserves for the state control area, for such period and based on such methodology as specified in the Grid Code and publish the same on its website:

(2) The Nodal Agency shall publish the reassessed quantum within state SRAS & TRAS ahead basis and incremental requirement, if any, on real time basis after receipt of data from RLDC/NLDC/SLDC as the case may be.

Part I

Secondary Reserve Ancillary Service (SRAS)

7. Eligibility for an SRAS Provider

(1) A generating station or an entity having energy storage resource or an entity capable of providing demand response, on standalone or aggregated basis, connected to intra-State transmission system, shall be eligible to provide Secondary Reserve Ancillary Service, as an SRAS Provider, if it

(a) has bi-directional communication system with SLDC as applicable, as per the requirements stipulated in the Detailed Procedure by the NLDC/RLDC/SLDC:

(b) is AGC-enabled, in case of a generating station;

(c) can provide minimum response of 1 MW;

(d) has metering and SCADA telemetry in place for monitoring and measurement of energy delivered under SRAS, as stipulated in the Detailed Procedure ;

(e) is capable of responding to SRAS signal within 30 seconds and providing the entire SRAS capacity obligation within fifteen (15) minutes and sustaining at least for the next thirty (30) minutes;

8. Activation and Deployment of SRAS

(1) In addition to the SRAS activation centrally by NLDC/RLDC SRAS may also be activated and deployed by the Nodal Agency as and when required on account of the following events to maintain or restore grid frequency within the allowable band as specified in the Grid Code or replenish primary reserves:

(a) Considering the state network as control area, Area Control Error (ACE) of the State , going beyond the minimum threshold limit of ±10 MW or such other limit as may be notified by the Commission based on review of performance of SRAS;

(b) Such other events as specified in the Grid Code.

(2) The Area Control Error (ACE) for the state would be auto-calculated at the control centre of the Nodal Agency based on telemetered values, and the external inputs referred to in clauses (3) and (4) of this regulation, as per the following formula:

$$ACE = (I_a - I_s) - 10 * B_f * (F_a - F_s) + Offset$$

Where,

I_a = Actual net interchange in MW (positive value for export)
I_s = Scheduled net interchange in MW (positive value for export) B_f = Frequency Bias Coefficient in MW/0.1 Hz (negative value) F_a = Actual system frequency in Hz
F_s = Schedule system frequency in Hz
Offset = Provision for compensating for measurement error

(3) Frequency Bias Coefficient (B_f) and offset (account for measurement errors) shall be assessed and declared by the Nodal Agency in line with the notification by NLDC/RLDC/SLDC as per the Detailed Procedure and it shall normally be based on median Frequency Response Characteristic during previous financial year of the State/Region and refined from time to time.

(4) Nodal Agency may operate SRAS in any of the three control modes namely, tie-line bias control mode, flat frequency control mode or flat tie-line control mode depending on grid requirements.

9. Procurement of SRAS for Intra-State Entities

(1) The Nodal Agency shall arrange SRAS from intra-state generation in consultation with the beneficiaries through the mechanism as specified in this Regulation:

Provided that the Commission based on review of the operation of SRAS, may direct procurement of SRAS through market-based bidding mechanism to be specified separately.

(2) Intra-state generator willing to participate shall submit the application to NLDC through appropriate RLDC/SLDC for participating in SRAS.

(3) Intra-state generators willing to participate are required to obtain a standing consent (as per format SRAS-3 from Nodal Agency for participating in SRAS. Nodal Agency shall ensure that proper scheduling measurement (through SCADA). Metering (through special Energy Meters), accounting and settlement is in place before issuing consent to the concerned intra-state generator.

(4) Intra-state generators willing to participate shall ensure end-to-end communication as per Detailed Procedure.

(5) Intra-state generators willing to participate shall ensure the availability of appropriate hardware after checking the eligibility criterion as per Detailed Procedure.

(6) Intra-state generators willing to participate shall provide the signals in compliance with the Detailed Procedure.

(7) The SRAS Providers that are generating stations, shall be required to declare in such time interval as may be stipulated in the Detailed Procedure, the technical parameters as required by the Nodal Agency, including but not limited to installed capacity, declared capacity, maximum possible generation (Pmax), schedule, Technical Minimum, Ramp up and Ramp down capability.

(8) The SRAS Providers other than the generating stations shall be required to declare the technical requirements as may be stipulated in the Detailed Procedure .

(9) The SRAS Providers that are generating stations whose tariff is determined under section 62 of the Act, shall declare their energy charge / compenstation charges upfront on monthly basis in the manner as stipulated in the Detailed Procedure.

(2)The Nodal Agency, based on the estimate of the SRAS requirement , shall ascertain availability of adequate within State SRAS capacity by factoring in the declarations made by the Intra State SRAS Providers under this Regulation, on day-ahead basis and on real- time basis before the gate closure of the Real Time Market:

Provided that the capacity so ascertained shall be considered for SRAS based on actual availability of such capacity after the declaration of the RTM results.

(3)In case of the generating stations whose tariff is determined by the Commission under Section 62 of the Act, the NLDC/RLDC/SLDC as applicable shall identify the generating stations for providing SRAS,

(a) on day-ahead basis, based on the capacity available after the schedule has been communicated at 2300 hrs for the next day; and

(b) on real-time basis before the gate closure for incremental SRAS requirement:

Provided that the capacity so identified shall be considered for SRAS based on actual availability of such capacity after the declaration of the RTM results.

(4)There shall not be any commitment charge for the SRAS providers for the capacity ascertained under clause (7) or identified under clause (8) of this Regulation, but not signaled for SRAS:

Provided that the Commission based on review of the availability and performance of SRAS, may provide for a mechanism for the SRAS Providers to commit SRAS capacity in advance, and also for appropriate compensation for such committed SRAS capacity.

10. 10.Selection of Intra State SRAS Providers and Despatch of SRAS

(1) SRAS Provider shall be selected for the state by the Nodal Agency or RLDC or NLDC as the case may be for providing SRAS-Up or SRAS-Down based on the Custom Participation Factor.

(2) The Custom Participation Factor for each SRAS Provider shall be determined based on the following criteria:

(a) Rate Participation Factor (Ramping capability in MW/min); and

(b) Cost Factor (energy charge or compensation charge, as the case may be).

(3) The Custom Participation Factor for SRAS-Up shall be directly proportional to the normalised Rate Participation Factor and inversely proportional to the normalised Cost Factor. The Custom Participation Factor for SRAS-Down shall be directly proportional to the product of the normalised Rate Participation Factor and normalised Cost Factor.

(4) Based on the methodology as provided in clauses (2) and (3) of this Regulation, Custom Participation Factor shall be calculated which shall be normalised to determine the participation of each SRAS Provider.

(5) SRAS signal shall be allocated among the SRAS Providers to meet the SRAS requirement of the system based on the normalised Custom Participation Factor subject to the ramp limited resources available with the SRAS Provider(s).

(6) The details of Custom Participation Factor based on the principles provided in this Regulation shall be stipulated in the Detail Procedure.

(7) SRAS shall be despatched on regional basis through secondary control signals

(8) Secondary control signal for SRAS-Up and SRAS-Down from NLDC/Nodal agency shall be sent to the control centre of the Intra state SRAS Provider every 4 seconds .The Intra state SRAS Provider shall allow its control centre to follow the secondary control signal for SRAS-Up or SRAS-Down automatically without any manual intervention.

(9) The SRAS Provider shall increase or decrease active power injection or increase or decrease drawal or consumption, as the case may be, as per the automatic signal from the NLDC/RLDC/SLDC as the case may be;

(10) The SRAS Provider shall share real-time data with NLDC and the concerned,RLDC and SLDC, as - stipulated in the Detailed Procedure.

(11) Average of SRAS-Up and SRAS-Down MW data shall be calculated for every 5 minutes in absolute terms using archived SCADA data and reconciled with the data received at the control center of the SRAS Provider and shall be used for payment of incentive as per Regulation 12 of these regulations. The Nodal Agency shall be responsible for providing all such data, as required, to NLDC/RLDC in compliance with the Detailed Procedure and the CERC Ancillary Services Regulation, 2022 and amendments thereof.

(12) Average of SRAS-Up and SRAS-Down MW data shall be calculated for every 15 minutes time block in MWh for every SRAS Provider using the archived SCADA data at the Nodal Agency and reconciled with the data received at control centre of the SRAS Provider and shall be used for payment of energy charge or compensation charge, as the case may be, to the SRAS Provider as per

Regulation 11 of these regulations. The Nodal Agency shall be responsible for providing all such data, as required, to NLDC/RLDC in compliance with the Detailed Procedure and the CERC Ancillary Services Regulation, 2022 and amendments thereof.

11. 11.Payment for Intra State SRAS Provider

(1) SRAS Provider shall be paid from the Regional Deviation and Ancillary Service Pool Account, at the rate of their energy charge or compensation charge, as declared by the SRAS Provider, as the case may be, for the SRAS-Up MW quantum despatched for every 15 minutes time block, calculated as per clause (12) of Regulation 10 of these regulations.

(2) SRAS Provider shall pay back to the Regional Deviation and Ancillary Service Pool Account, at the rate of their energy charge or compensation charge, as the case may be, for the SRAS-Down MW quantum despatched for every 15 minutes time block, calculated as per clause (12) of Regulation 10 of these regulations.

(3) SRAS Provider shall be eligible for incentive based on performance as per Regulation 12 of these regulations.

(4) Methodology of computation under clauses (1) to (3) of this Regulation shall be as stipulated in the Detailed Procedure.

12. 12.Performance of Intra State SRAS Provider and incentive

(1) The actual response of SRAS Provider against the secondary control signals from the Nodal Agency /RLDC/ NLDC to the control centre of the SRAS Provider shall be monitored by the Nodal Agency, in coordination with NLDC/RLDC as per the procedure stipulated in the Detailed Procedure.

(2) All measurements of secondary control signals from the Nodal Agency to the control centre of the SRAS Provider and actual response of SRAS Provider shall be carried out on post-facto basis using SCADA data. Performance of the SRAS Provider shall be measured by the Nodal Agency, in coordination with NLDC/RLDC, by comparing the actual response against the secondary control signals for SRAS-Up and SRAS-Down sent every 4 seconds to the control centre of the SRAS Provider measured using 5-minute average data. The methodology for measurement of performance of SRAS Provider based on this Regulation shall be as stipulated in the Detailed Procedure.

(3) SRAS Provider shall be eligible for incentive based on the performance measured as per clause (2) of this Regulation and the 5-minute MWh data calculated for SRAS-Up and SRAS-Down as per clause (11) of Regulation 10 of these regulations and aggregated over a day, as under:

Actual performance vis-à-vis secondary control signal for an SRAS Provider	Incentive Rate (paise/kWh)
95 % and above	(+) 50
75 % to below 95%	(+) 40
60 % to below 75%	(+) 30
50% to below 60%	(+) 20
20 % to below 50%	(+) 10
Below 20%	0

(4) Incentive payments shall be calculated

(a) for each SRAS Provider, being a generating station, for energy supplied for a day as follows:

Incentive for SRAS Provider = Actual Response (MWh) x (1-NAC) x Incentive Rate

(b) for each SRAS Provider being an entity other than generating station as follows:

Incentive for SRAS Provider = Actual Response (MWh) x Incentive Rate

Where,

'Actual Response' is the actual energy output (in MWh) of the SRAS Provider communicated to the Nodal Agency aggregated over 5 minutes in absolute terms and then summed for a day.

'NAC' is percentage Normative Auxiliary Energy Consumption for similar class of generating stations, as specified in the Tariff Regulations.

'Incentive Rate' in Paise/kWh is the incentive rate applicable based on the performance assessment of SRAS Provider.

13. 13.Failure in performance of SRAS Provider

(1) Performance below 20% for two consecutive days by an SRAS Provider shall make the SRAS Provider liable for disqualification for participation in SRAS for a week by the Nodal Agency.

(2) Violation of directions of the Nodal Agency for SRAS under these Regulations shall make the SRAS Providers liable for penalties as per the provision of the Act.

Part II

Tertiary Reserves Ancillary Services (TRAS)

14. 14.Eligibility for a TRAS Provider

A generating station or an entity having energy storage resource or an entity capable of providing demand response, on standalone or aggregated basis, connected to intra-State transmission system shall be eligible for participation as TRAS Provider, if

(a) it is capable of varying its active power output or drawl or consumption, as the case may be, on receipt of despatch instructions from the Nodal Agency; /RLDC/NLDC and

(b) it is capable of providing TRAS within 15 minutes and sustaining the service for at least next 60 minutes.

(c) State Utilities and intra state entities proposing to participate in the Day Ahead AS Market and Real Time AS Market shall obtain "Standing Clearance" from the Nodal Agency. The standing clearance already issued for short term market would be valid for participation in the TRAS market subject to registration in NOAR

(d) The Nodal Agency, would maintain record of cleared and despatched TRAS quantum for intra-state entity TRAS Providers. The Nodal agency, shall ensure that cleared TRAS quantum of intra-state TRAS Provider shall not be scheduled by the intra-state beneficiaries/ procurers.

(e) Nodal agency shall use the despatched quantum of TRAS for intra-state TRAS Provider and incorporate it in the state's net schedule (with appropriate sign) for the purpose of monitoring deviations at state periphery and at intra-state TRAS Provider periphery.

(f) SLDC shall include the 15-minute TRAS MW despatched quantum data in the schedules of TRAS Providers as received from RLDC for deviation settlement.

(g) As per interim methodology for estimation of reserves for SRAS and TRAS as approved by the Central Commission, the Nodal agency shall maintain reserves as estimated by NLDC or as per the estimation carried out by the Nodal Agency in accordance with the IEGC or state Grid Code, as the case may be.

15. 15.Activation and Deployment of TRAS

TRAS shall be activated and deployed by the NLDC/RLDC/SLDC on account of the following events:

(a) In case the secondary reserve has been deployed continuously in one direction for fifteen (15) minutes for more than 100 MW, in order to replenish the secondary reserve;

(b) Such other events as specified in the Grid Code.

16. 16.Procurement of TRAS

1) Procurement of TRAS through Day Ahead AS Market and Real Time AS Market shall be undertaken in accordance with the bidding timelines specified in the Grid Code:Provided that until specific provisions in this regard are specified in the Grid Code, the bidding timelines for Day Ahead AS Market and Real Time AS Market shall be the same as those of the Day Ahead Market for energy and Real Time Market for energy respectively.

2) TRAS Requirement: The Nodal Agency throughNLDC/RLDC as applicable shall communicate to the power exchange(s), the quantum of requirement of TRAS-Up and TRAS-Down on day-ahead basis before commencement of the Day Ahead Market and incremental requirement, if any, over and above the procurement in the Day Ahead Market, on real-time basis, before the commencement of the Real Time Market:

Provided that the quantum of requirement on day-ahead basis shall be communicated after considering the TRAS resources likely to be available on real-time basis.

3) Sell Bid: The TRAS Providers shall submit bids in the following manner:

(a) Bids for TRAS-Up and TRAS-Down shall be submitted for each time block or for a minimum of two consecutive time blocks in the Day Ahead AS Market or in the Real Time AS Market.

(b) For TRAS-Up, Energy-Up bid in Rs./MWh shall be submitted for the offer volume in MW.

(c) For TRAS-Down, Energy-Down bid in Rs./MWh shall be submitted for the offer volume in MW.

4) The capacity offered, as a sell bid for energy and for TRAS from a resource in the same time-block, shall be separate and non-overlapping.

5) The capacity offered, as a sell bid in power exchange(s) for providing TRAS-Up or TRAS- Down from a resource in the same time-block, shall be separate and non-overlapping.

6) TRAS Provider cleared in the Day Ahead AS Market may place incremental bids in the Real Time AS Market. TRAS Provider not cleared in the Day Ahead AS Market or which has not participated in the Day Ahead AS Market, may also place bids in the Real Time AS Market.

7) The power exchanges shall collect the bids for TRAS-Up and TRAS-Down and share the same with the NLDC/RLDC/SLDC as applicable for price discovery in terms of Regulation 17 of these regulations.

8) The NLDC/RLDC/SLDC as applicable shall stipulate details regarding the protocol for exchange of information .

17. 17.Price Discovery of TRAS

Price Discovery for TRAS-Up

(1) The price discovery for TRAS-Up shall be based on the principle of Uniform Market Clearing Price, subject to market splitting in case of congestion.

(2) The highest Energy-Up bid corresponding to the requirement for TRAS-Up as intimated under clause (1) of Regulation 16 of these regulations, shall be the Market Clearing price for Energy-Up in the Day Ahead Ancillary Service Market (MCP-Energy-Up-AS-DAM) or in the Real Time Ancillary Service Market (MCP-Energy-Up-AS-RTM), as the case may be.

Price Discovery for TRAS-Down

(3) The price discovery for TRAS-Down shall be based on the principle of Pay-as-bid.

(4) The Energy-Down bids shall be stacked in a descending order from the highest Energy- Down bid to the lowest Energy-Down bid and the NLDC shall select the TRAS-Down Providers to meet the estimated TRAS requirement in that order.

(5) The Commission may, if considered necessary, provide for a price cap for TRAS.

18. 18.Scheduling and Despatch of TRAS

(1) Scheduling and despatch of TRAS shall be according to the provisions of the State Grid Code or IEGC. as the case may be,

(2) Information in respect of the TRAS-Up and TRAS-Down cleared for the Day Ahead Ancillary Service Market and the Real Time Ancillary Service Market shall be published on the website of the NLDC , and shall be simultaneously communicated to the concerned power exchanges for onward communication to the selected TRAS providers.

(3) The schedule for TRAS shall become effective from the time block starting 15 minutes after issue of the despatch instruction by the NLDSC /RLDC/SLDC as applicable:

Provided that the NLDC/RLDC/SLDC, as applicable, may issue despatch instruction from any time block after the above-mentioned time block, if required, based on the anticipated system conditions.

(4) The Nodal Agency shall deploy the cleared TRAS-Up as under:

(a) In case the actual requirement for deployment of TRAS-Up is equal to the total TRAS-Up cleared in the AS market, despatch instructions shall be issued to all such TRAS-Up Providers.

(b) In case the actual requirement for deployment of TRAS-Up is less than the total TRAS-Up cleared in the AS market, the despatch instructions shall be issued to the TRAS Providers in the following manner:

(i) In the event of the MCP-Energy-Up-DAM being equal to the MCP-Energy-Up-RTM, TRAS-Up shall be despatched on pro-rata basis;

(ii) In event of the MCP-Energy-Up-DAM and MCP-Energy-Up-RTM not being equal, TRAS-Up with lower MCP-Energy-Up shall be despatched first followed by the TRAS-Up with higher MCP-Energy-Up:

Provided that if the actual requirement of deployment of TRAS-Up is less than the cleared volume in the AS market with lower MCP-Energy-Up, TRAS-Up cleared in the said market shall be despatched on pro-rata basis:

Provided further that if the actual requirement of deployment of TRAS-Up is more than the cleared volume in the AS market with lower MCP-Energy-Up, TRAS-Up cleared in the AS market with lower MCP-Energy-Up shall be despatched in full and the TRAS-Up cleared in the market with higher MCP-Energy-Up shall be despatched on pro-rata basis.

(5) The TRAS-Down shall be deployed as under:

(a) In case the actual requirement for deployment of TRAS-Down is equal to the total TRAS-Down cleared in the AS market, the despatch instructions shall be issued to all such TRAS-Down Providers.

(b) In case the actual requirement for deployment of TRAS-Down is less than the total TRAS-Down cleared in the AS market, the despatch instructions shall be issued to the TRAS-Down Providers in the descending order of their Energy-Down bids, so that the selected TRAS-Down Provider with the highest Energy-Down bid shall be despatched first, followed by the TRAS-Down Provider with the next highest Energy-Down bid and so on.

19. 3).Payment for TRAS

(1) TRAS-Up Provider shall receive MCP-Energy-Up, as discovered in the Day Ahead AS Market or the Real Time AS Market, as the case may be, for the quantum of energy instructed to be despatched by the as applicable.

(2) TRAS-Up Provider shall receive commitment charges at the rate of ten percent of the MCP-Energy-Up-AS-DAM or the MCP-Energy-Up-AS-RTM, as the case may be, subject to the ceiling of 20 paise/kWh for the quantum of TRAS-Up cleared in the Day Ahead AS Market or the Real Time AS Market as the case may be, but not instructed to be despatched.

(3) The TRAS-Down Provider shall pay back to the Deviation and Ancillary Service Pool Account at the rate of their Energy-Down bid in the Day Ahead AS Market or the Real Time AS Market, as the case may be, for the capacity instructed to be despatched.

(4) In case of forced outage of a generating station or a unit of a TRAS Provider, being a generating station, which has been cleared in the Day Ahead AS Market, such TRAS Provider shall promptly inform the same to the NLDC via Nodal Agency and the NLDC/ Nodal agency , as applicable shall procure the corresponding TRAS quantum of power in Real Time AS Market, if required:

Provided that such TRAS Provider shall receive no payment in case of forced outage of a complete station; or receive payments based on the reduced quantum of power in case of forced outage of a unit, as the case may be.

Part III

Shortfall in Procurement of SRAS and TRAS or Emergency Conditions

20. 20. Shortfall in Procurement of SRAS and TRAS or Emergency Conditions

In case of shortfall

(1) (1) All generating stations (having no Power Purchase Agreement with the state Discom), whose tariff is determined by the Commission under Section 62 of the Act including those having URS power after declaration of the RTM results, shall be deemed to be available for use by the NLDC/RLDC/SLDC as applicable for SRAS or TRAS or both, subject to technical constraints of such generating stations.

(2) The generating stations as referred to in clause (1) of this Regulation, whose URS is despatched as SRAS-Up shall be paid their energy charge in terms of clause (1) of Regulation 11 and incentive in terms of Regulation 12 of these regulations.

(3) The generating stations as referred to in clause (1) of this Regulation, if despatched as SRAS-Down shall pay back to the Deviation and Ancillary Service Pool Account in terms of clause (2) of Regulation 11 and shall be paid incentive in terms of Regulation 12 of these regulations.

(4) The generating stations as referred to in clause (1) of this Regulation, whose URS is despatched for TRAS-Up, in the event of short-fall in procurement of TRAS-Up through the Market, shall be paid at the rate of 110% of their energy charges for the quantum of TRAS-Up despatched.

(5) The generating stations as referred to in clause (1) of this Regulation, if despatched for TRAS-Down, in the event of short-fall in procurement of TRAS-Down through the Market, shall pay back at the rate of 90% of their energy charges, corresponding to the quantum of TRAS-Down despatched.

In case of emergency conditions

(6) In case the NLDC/RLDC/SLDC requires any generating station to provide Ancillary Services to meet the emergency conditions for reasons of grid security as per the provisions of the Grid Code, such generating station shall be compensated at the rate of the energy charge as determined under Section 62 of the Act or adopted under Section 63 of the Act, or at the rate of the compensation charge declared by the AS provider, as the case may be.

Part IV

Accounting and Settlement of SRAS and TRAS

21. 21.Accounting and Settlement for Intra-State SRAS and TRAS

(1) Weekly account data (5-minute MWh data and 15-minute MWh data) shall be shared by the intra-state generators through Nodal Agency to NLDC in the format that would be provided after connection request

(2) The settlement of payments towards SRASUp/SRAS-Down 15-minute MWh along with the performance based incentive would be done by the RPC with the respective Regional Deviation and Ancillary Service Pool Account.

(3) The settlement of payments towards TRASUp/ TRAS-Down along with the applicable commitment charges would be done by the NLDC/RLDCs through the respective Regional Deviation and Ancillary Service Pool Account.

(4) Deviation of AS Provider in every 15 minutes time block shall be calculated as under and settled as per the procedure of DSM Regulations:

MWh Deviation for AS Provider = (Actual MWh of AS Provider) − (Scheduled MWh of AS Provider including TRAS MWh despatched) − (SRAS MWh of AS Provider despatched)

(5) The Deviation and Ancillary Service Pool Account shall be charged for:

(a) the full cost of despatched SRAS-Up including the energy charge or the compensation charge, as the case may be, for every time-block for the state as well as the incentive for SRAS, payable to the concerned SRAS Provider;

(b) the compensation as referred to in the proviso to clause (9) of Regulation (9) of these regulations.

(c) the full cost towards TRAS-Up including the charges for the quantum cleared and despatched and the commitment charge for the quantum cleared but not despatched.

(6) The Deviation and Ancillary Service Pool Account shall receive credits for:

(a) payments made by SRAS Provider for the SRAS-Down despatched; and

(b) payments made by TRAS Provider for the TRAS-Down despatched.

(7) The net of the charges and the credits under clauses (4) and (5) of this Regulation shall be settled through the charges collected under the DSM Regulations.

(8) Settlement of payment liabilities in respect of the AS providers shall be done directly by the NLDC/RPC/Nodal agency, as the case may be on a weekly basis.

(9) In case of deficit in the Deviation and Ancillary Service Pool Account for payment to SRAS Providers and TRAS Providers, surplus amount available in other Deviation and Ancillary Service Pool Account shall be used for such payment, as per the methodology stipulated in the Detailed Procedure.

(10) No retrospective settlement of energy charge or compensation charge, as the case may be, shall be undertaken.

(11) The NLDC/RLDC/SLDC, as the case may be shall publish information on its website about SRAS and TRAS procured, scheduled and dispatched on weekly basis and submit quarterly detailed feedback reports to the Commission.

22.Transmission charges and losses for SRAS Provider and TRAS Provider

No transmission charges or transmission losses or transmission deviation charges shall be payable for SRAS and TRAS.

Part V

Miscellaneous

23. Detailed Procedure

(1) The Nodal Agency in line with NLDC/RLDC shall issue the Detailed Procedure after stakeholders' consultation within a period of 3 months of notification of these regulations and submit the same for approval to the Commission.

(2) The Detailed Procedure shall contain the operational aspects of SRAS and TRAS including, but not limited to,

(a) bi-directional communication system as referred to in sub-clause (a) of clause (1) of Regulation 7 of these regulations;

(b) metering and SCADA telemetry for monitoring and measurement of energy delivered under SRAS as referred to in sub-clause (d) of clause (1) of Regulation 7 of these regulations;

(c) details regarding declaration of technical parameters as referred to in clause (3) of Regulation 9 of these regulations;

(d) technical requirements for SRAS provider as referred to in clause (4) of Regulation 9 of these regulations;

(e) manner of declaration of the energy charge and the compensation charge, respectively as referred to in clauses (5) and (6) of Regulation 9 of these regulations;

(f) details of Custom Participation Factor for allocation of SRAS signal among SRAS Providers as referred to in clause (6) of Regulation 10 of these regulations;

(g) methodology of sharing of real time data as referred to in clause (10) of Regulation 10 of these regulations;

(h) methodology of computation for SRAS as referred to in clause (4) of Regulation 11 of these regulations;

(i) details regarding monitoring of actual response of SRAS providers as referred to in clause (1) of Regulation 12 of these regulations

(j) details of the methodology for measurement of performance of SRAS Provider as referred to in clause (2) of Regulation 12 of these regulation;

(k) details regarding the protocol for exchange of information between the NLDC/RLDC/SLDC and the power exchanges as referred to in clause (8) of Regulation 16 of these regulation;

(l) details of information in respect of the TRAS cleared in the market as referred in clause (2) of Regulation (18) of these regulations, and such other information as may be directed by the Commission;

(m) methodology of payment to SRAS and TRAS providers in case of deficit in the concerned Deviation and Ancillary Service Pool Account as referred to in clause (8) of Regulation 21 of these regulations;

(n) other related and incidental matters.

24. Power to Relax

The Commission may by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person.

25. Power to issue directions and Removal of Difficulties

If any difficulty arises in giving effect to these regulations, the Commission may on its own motion or on an application filed by any affected party, issue any general or specific directions as may be considered necessary in furtherance of the objective and purpose of these regulations.

ASHOK KUMAR BARMAN (RETD.),
Secretary,
Assam Electricity Regulatory Commission.

Guwahati : Printed and Published by the Director, Directorate of Printing & Stationery, Assam, Guwahati-21.
Extraordinary Gazette No. 257 - 10 + 10 - 24 - 03 - 2025. (visit at– dpns.assam.gov.in)